

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

# **NOTICE OF ACCEPTANCE (NOA)**

Mitsubishi Chemical America, inc. 401 Volvo Parkway Chesapeake, VA 23320

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: "Alpolic and Alpolic/FR" Composite Wall Panel Systems with 5/8" Plywood Substrate

APPROVAL DOCUMENT: Drawing No. 1-P, titled "Alpolic and Alpolic/fr Composite Wall Panel Systems", sheets 1 through 10 of 10, prepared by Mitsubishi Chemical America, Inc., dated November 11, 2002, signed and sealed by Christopher W. Stater, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

# MISSILE IMPACT RATING: Large and Small Missile Impact

**LABELING:** Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

■ INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 00-0315.06 and consists of this page 1 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E.



Helmy A. Meler 04/17/03

NOA No 03-0130.07 Expiration Date: 08/09/2006 Approval Date: 04/17/2003

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Helmy A. Malar 04/17/03



NOA No 03-0130.07

Expiration Date: 08/09/2006 **Approval Date: 04/17/2003** 

Page 1

# ALPOLIC and ALPOLIC/FR (FIRE RATED) COMPOSITE WALL PANEL SYSTEMS FOR FLORIDA BUILDING CODE

# **GENERAL NOTES**

- 1. THESE ALPOLIC and APLOLIC/fr COMPOSITE PANELS SHALL BE USED FOR WALL CONSTRUCTION ONLY. EACH ACTUAL WALL PROJECT SHALL BE CONSTRUCTED USING THE DETAILS SHOWN ON THESE DRAWINGS AS MINIMUM REQUIRED SPECIFICATIONS.
- 2. THE WALL DESIGN ALLOWABLE PRESSURES FOR THESE WALL PANEL SYSTEMS ARE +70.0 PSF / -90.0 PSF

3. THESE ALPOLIC and APLOLIC/fr COMPOSITE WALL PANEL SYSTEMS ARE TESTED IN ACCORDANCE WITH THE FOLLOWING PROTOCOLS:

TAS-202-94, UNIFORM STATIC AIR PRESSURE TEST
TAS-203-94, CYCLIC WIND PRESSURE TEST
AND THEY SHALL BE INSTALLED ON FRONT OF A 5/8" (5 PLY) PLYWOOD SUBSTRATE SUPPORTED BY STUDS AT 16" O.C. AS SHOWN IN THESE APPROVED DRAWINGS.

# **MATERIAL SPECIFICATIONS:**

# **ALUMINUM EXTRUSIONS**

- MATERIAL: M2, F2, A2, HS, and HR ARE EXTRUDED ALUMINUM ALLOY 6063 WITH A T6 TEMPER. (By Kistler McDougall)
- 2. MATERIAL: CAY-1009 TEE, CAY-1010 FEMALE, CAY-1011 MALE, CAY-1012 STIFFENER AND CAY-1013 RETAINER ARE EXTRUDED ALUMINUM ALLOY 6063 WITH A T6 TEMPER (By CAY ARCHITECTURAL PRODUCTS)
- 3. FINISH: MILL FINISH

# COMPOSITE PANEL

- 1. ALPOLIC ALUMINUM COMPOSITE METAL PANEL 4MM THICK (0.157") AND 6MM THICK (0.236") AS MANUFACTURED BY MITSUBISHI CHEMICAL AMERICA, INC., CHESAPEAKE, VA
- 2. ALPOLIC/fr (FIRE RATED) ALUMINUM COMPOSITE METAL PANEL 4MM THICK (0.157")
  AS MANUFACTURED BY MITSUBISHI CHEMICAL FUNCTIONAL PRODUCTS, INC., UEDA, JAPAN
- 3. CORE: THERMOPLASTIC MATERIAL WHICH IN COMPOSITE ASSEMBLY MEETS PERFORMANCE CHARACTERISTICS SPECIFIED.
- 4. FACE SHEET: 0.020" ALUMINUM 3105-H14 ALLOY
- 5. FINISH: LUMIFLON-BASE FLUROPOLYMER RESIN COATING.
- 6. MAXIMUM DIMENSIONS: 62" WIDE X 288" LONG
- 7. TECHNICAL DATA

DESCRIPTION	TEST	4MM ALPOLIC RESULTS	4MM ALPOLIC/fr RESULTS
SPECIFIC GRAVITY WEIGHT TENSILE STRENGTH YIELD STRENGTH ELONGATION PUNCHING SHEAR RESISTANCE (1"DIA.) PUNCHING SHEAR MAX LOAD BOND INTEGRITY VERTICAL PULL DRUM PEEL FLATWISE SHEAR RATE OF BURNING FLAME SPREAD INDEX SMOKE DEVELOPED INDEX SELF IGNITION TEMPERATURE FLASH IGNITION TEMPERATURE SURFACE FLAMMABILITY SOUND TRANSMISSION	ASTM E-8 ASTM E-8 ASTM D-732 ASTM D-732 ASTM C-297 ASTM C-297 ASTM C-273 ASTM D-635 ASTM E-84 ASTM E-84 ASTM E-84 ASTM D-1929 ASTM D-1929 ASTM D-1929 ASTM E-108-88 ASTM E-413	1.38 1.12 LB/SQ.FT 7452 PSI NDY 16% 4025 PSI 1920 PSI 1806 PSI 33.6 IN-LB/IN 1225 PSI CC1 00 00 752°F 716°F PASSED STC-26	1.90 1.56 LB/SQ.FT 5693 PSI NDY 8% 4637 PSI 2259 PSI 427 PSI 27.6 IN-LB/IN 949 PSI  00 10 837°F 811°F PASSED

# FRAMING & ACCESSORIES

- 1. STEEL STUDS AND TRACKS: 16 GA. MIN. GALVANIZED STEEL WITH MIN. PROPERTIES OF 50 KSI YIELD, 65 KSI ULTIMATE,
- 2. STUD & TRACK FASTENERS: #12 x 1-1/2" HEX WASHER HEAD TRAXX 3 BUILDEX SCREW.
- 3. PLYWOOD: 5/8" THICK, (5 PLY) EXTERIOR GRADE SECURED WITH #8 x 1 5/8" BIULDEX SCREWS AT 16" O.C. AROUND PERIMETER AND IN THE MIDDLE OF PLYWOOD.
- 4. PANEL FASTENERS: #10 x 1" HEX WASHER HEAD TEK SCREWS SPACED AT 16" O.C.
- 5. STIFFENER FASTENERS: #10 x 1" HEX WASHER HEAD TEK SCREWS.
- JOINT SILICONE: DOW CORNING #795 SILICONE SEALANT.
- STRUCTURAL SILICONE: DOW CORNING #1199 SILICONE SEALANT.
- BACKER ROD: 3/4" DIA. DENVER FOAM OPEN CELL BACKER ROD.
- THE STRUCTURAL ADEQUACY OF THE 16 GA. GALVANIZED STEEL STUDS AND THE REST OF THE STRUCTURAL FRAMING SUPPORTING THE METAL PANELS IS NOT PART OF THIS PRODUCT CONTROL APPROVAL AND IT SHALL BE REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT.

PRODUCT REVISED
as complying with the Florida
Buiding Code
Acceptance No 03 - 0.130 : 07
Expiration Date 08 / 09 / 72

By He Lun H. Modal
Miami Dado Product Control
Division

SHEET 1 OF 10

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
‡ 1/32 JXX ‡ .01 ‡ 1/2 APPROVALS DATE

MATERIAL DRAWN
ENGINEERING MS 11/11/02

FROJ MGMT SIZE CAGE CODE DWG NO.

REV

DO NOT SCALE DRAWING PRODUCTION

MITSUBISHI CHEMICAL AMERICA, INC.

MITSUBISHI CHEMICAL AMERICA, INC.

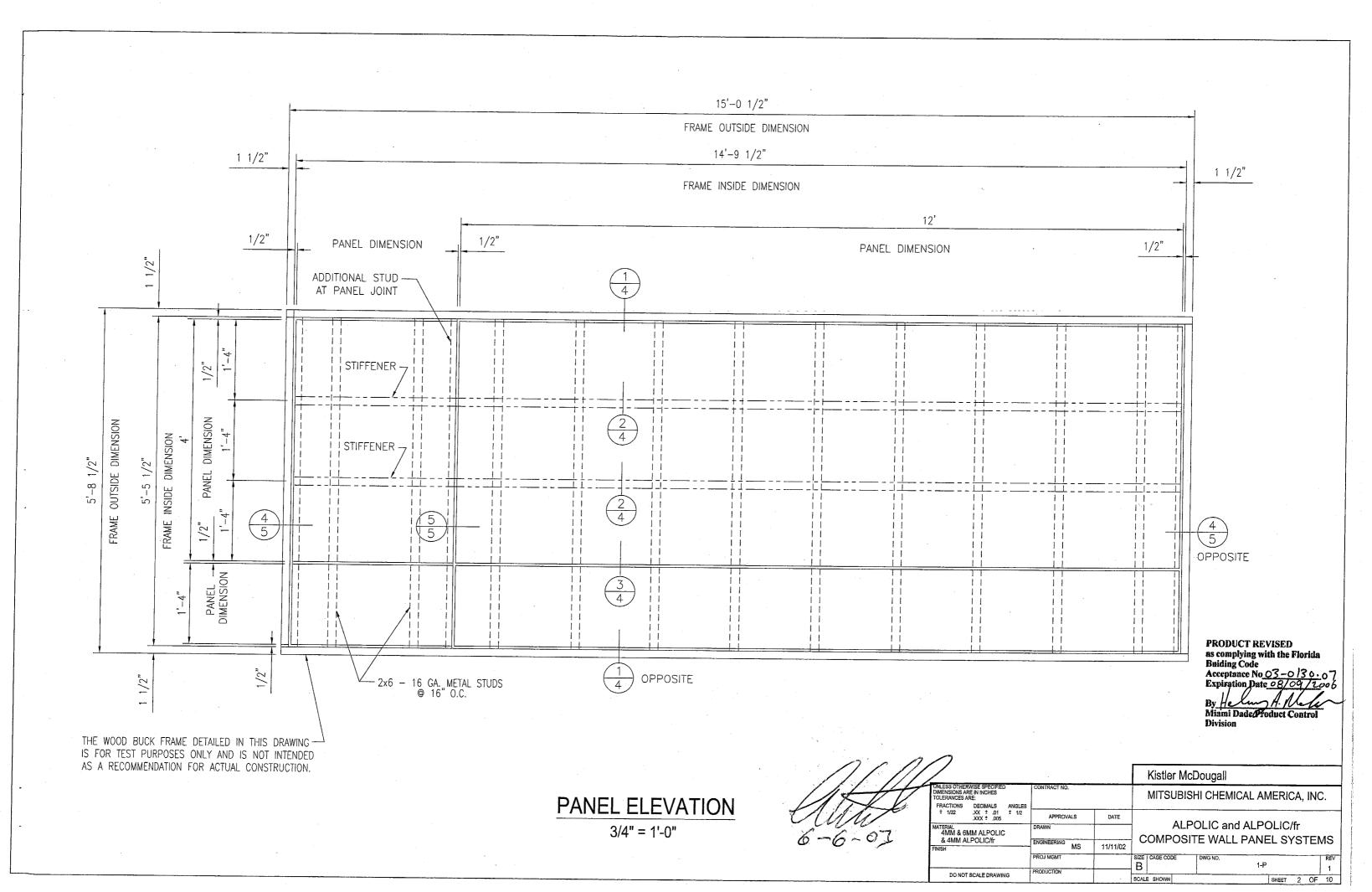
MITSUBISHI CHEMICAL AMERICA, INC.

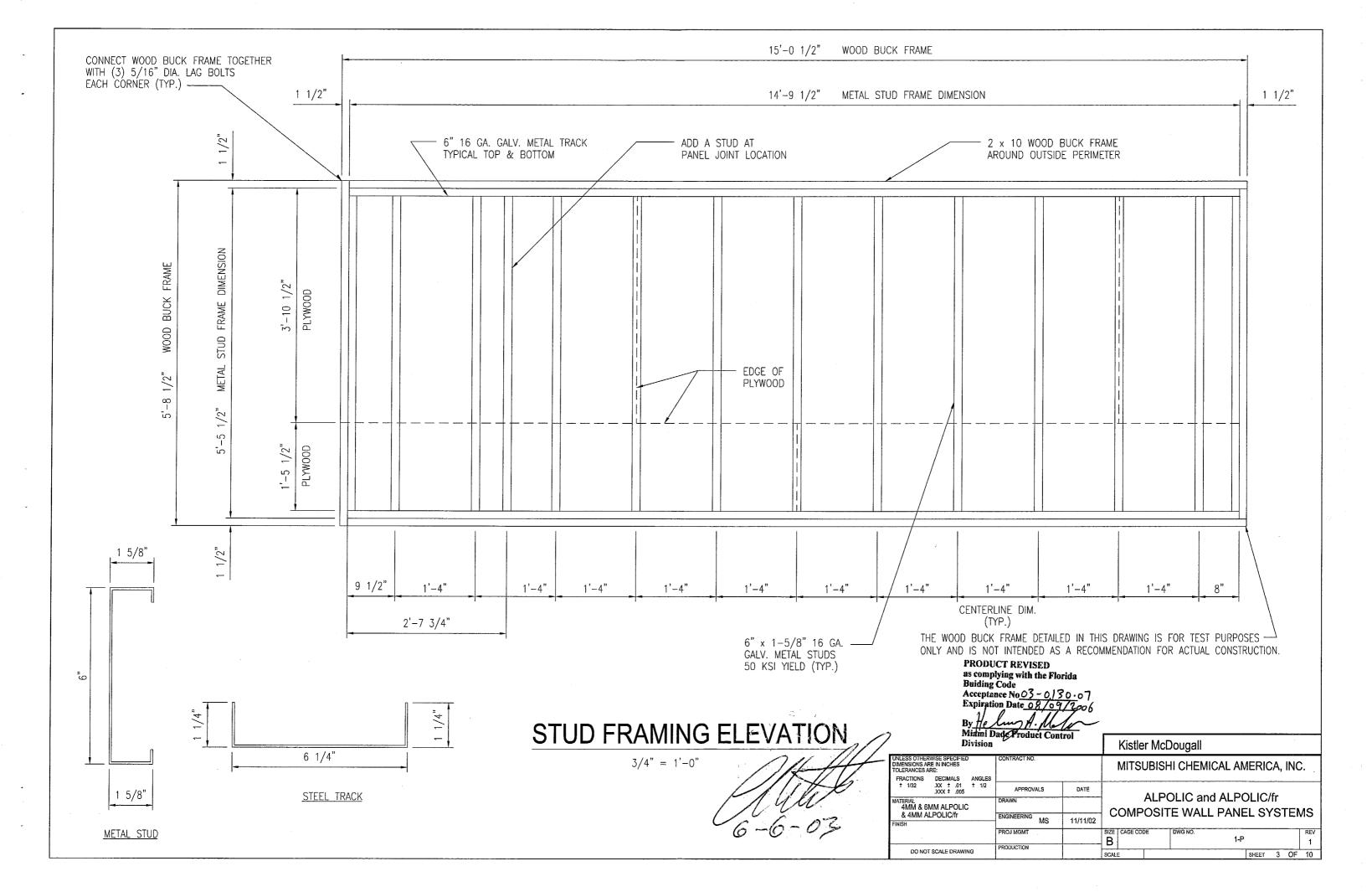
ALPOLIC and ALPOLIC/fr

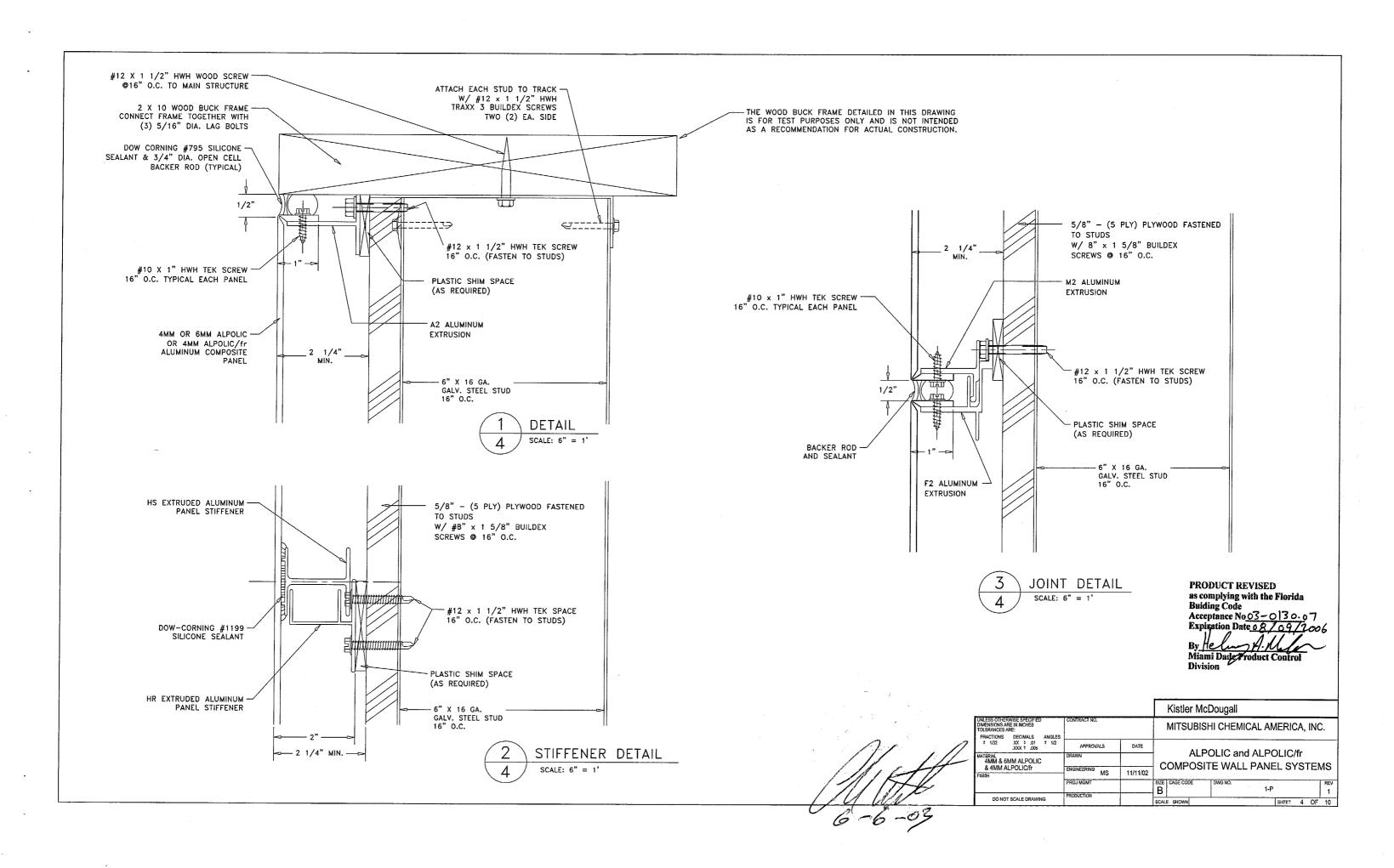
COMPOSITE WALL PANEL SYSTEMS

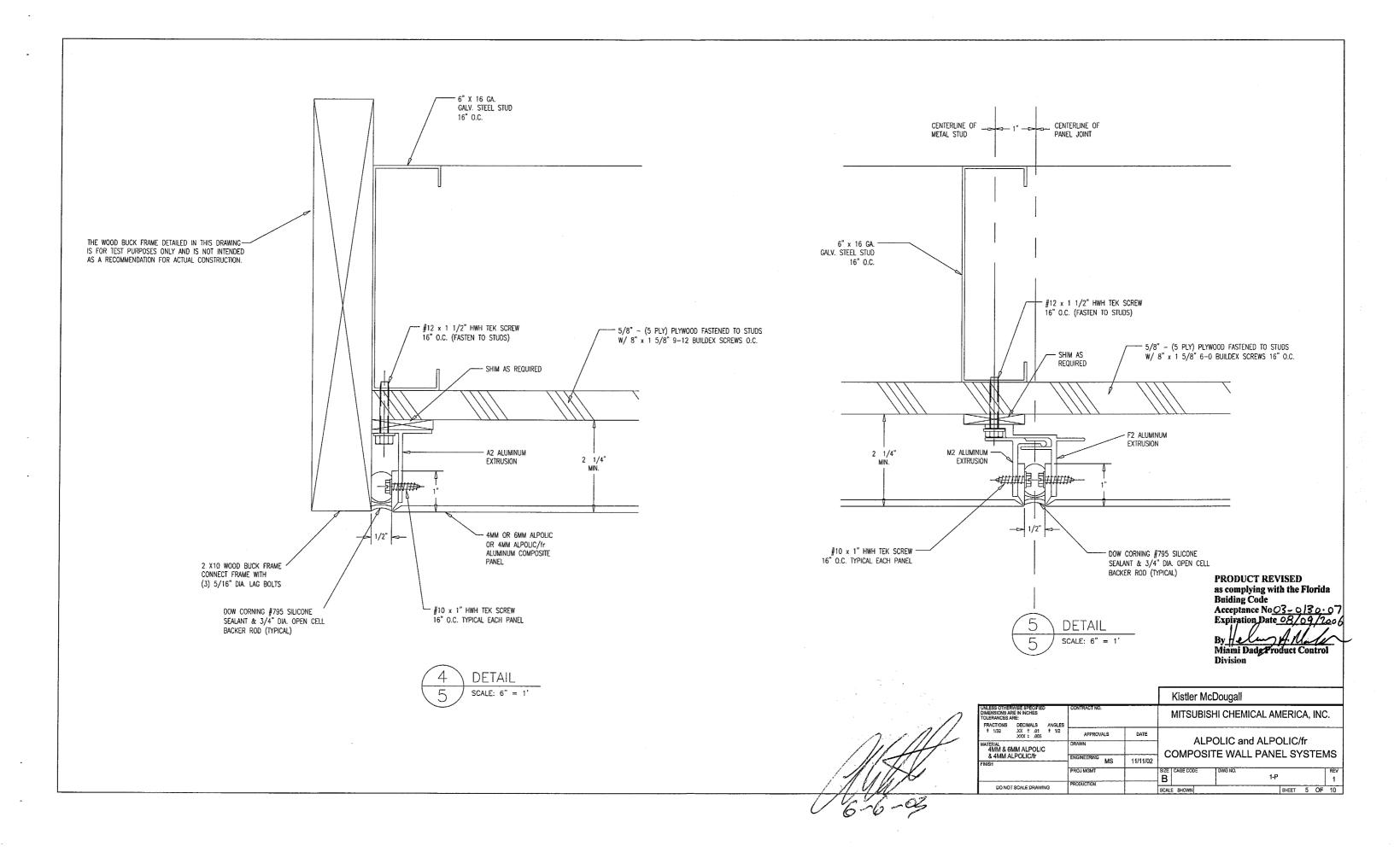
1-P

DO NOT SCALE DRAWING PRODUCTION

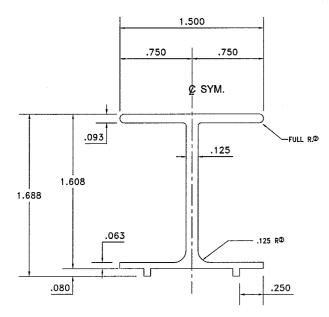








<u>HS</u>



BREAK CORNERS .015 R EXCEPT AS NOTED ACTUAL SIZE

DIE DATA

EST. AREA: .430

DIE SIZE: 6

EST. WEIGHT: .516

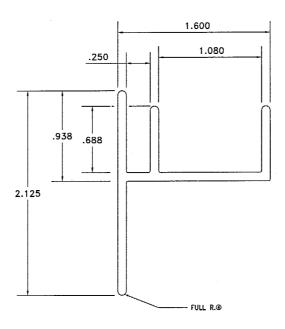
NO. HOLES: 1

EXT. LENGTH: 5 1/8" = 1 @ 35' EST. PERI.:

FACTOR:

R/R:

HR



# BREAK CORNERS .015 R .090 TYPICAL METAL THICKNESS ACTUAL SIZE

DIE DATA

EST. AREA: .465 EST. WEIGHT: .558 DIE SIZE: 6

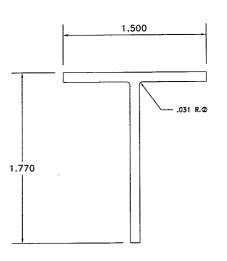
EST. PERI.:

NO. HOLES: 1 EXT. LENGTH: 5 1/8 = 1 @ 36

FACTOR:

R/R

A2



BREAK CORNERS .010 R

.100 WALL THICK TYPICAL

ACTUAL SIZE

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 03-0/30:07

DIE DATA

EST. AREA: .317 EST. WEIGHT: .380

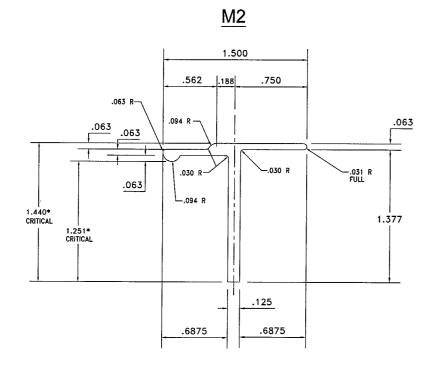
DIE SIZE: 6 NO. HOLES: 1

EST. PERI.: 6.54 FACTOR: 17

EXT. LENGTH:

R/R: 5 1/8 = 1 @ 53'

Kistler McDougall MITSUBISHI CHEMICAL AMERICA, INC. APPROVALS ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS 11/11/02 MS DO NOT SCALE DRAWING SHEET 6 OF 10



ACTUAL SIZE BREAK SHARP CORNERS, 005 R.

DIE DATA

EST. AREA: .275

EST. WEIGHT: .330

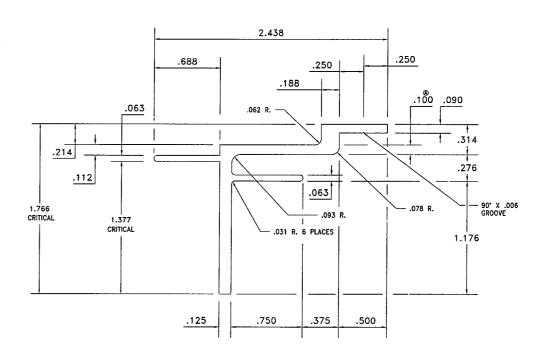
DIE SIZE: 6 NO. HOLES: 1

EST. PERI.: 5.831

FACTOR: 18

EXT. LENGTH: 4 1/2 = 1- 46' R/R: 5 1/8" = 1- 62'

<u>F2</u>



ACTUAL SIZE BREAK SHARP CORNERS. 010R.

DIE DATA

EST. AREA: .484

DIE SIZE: 6

EST. WEIGHT: .581 EST. PERI.: 9.900

NO. HOLES: 1 EXT. LENGTH: 5 1/8 = 1@34

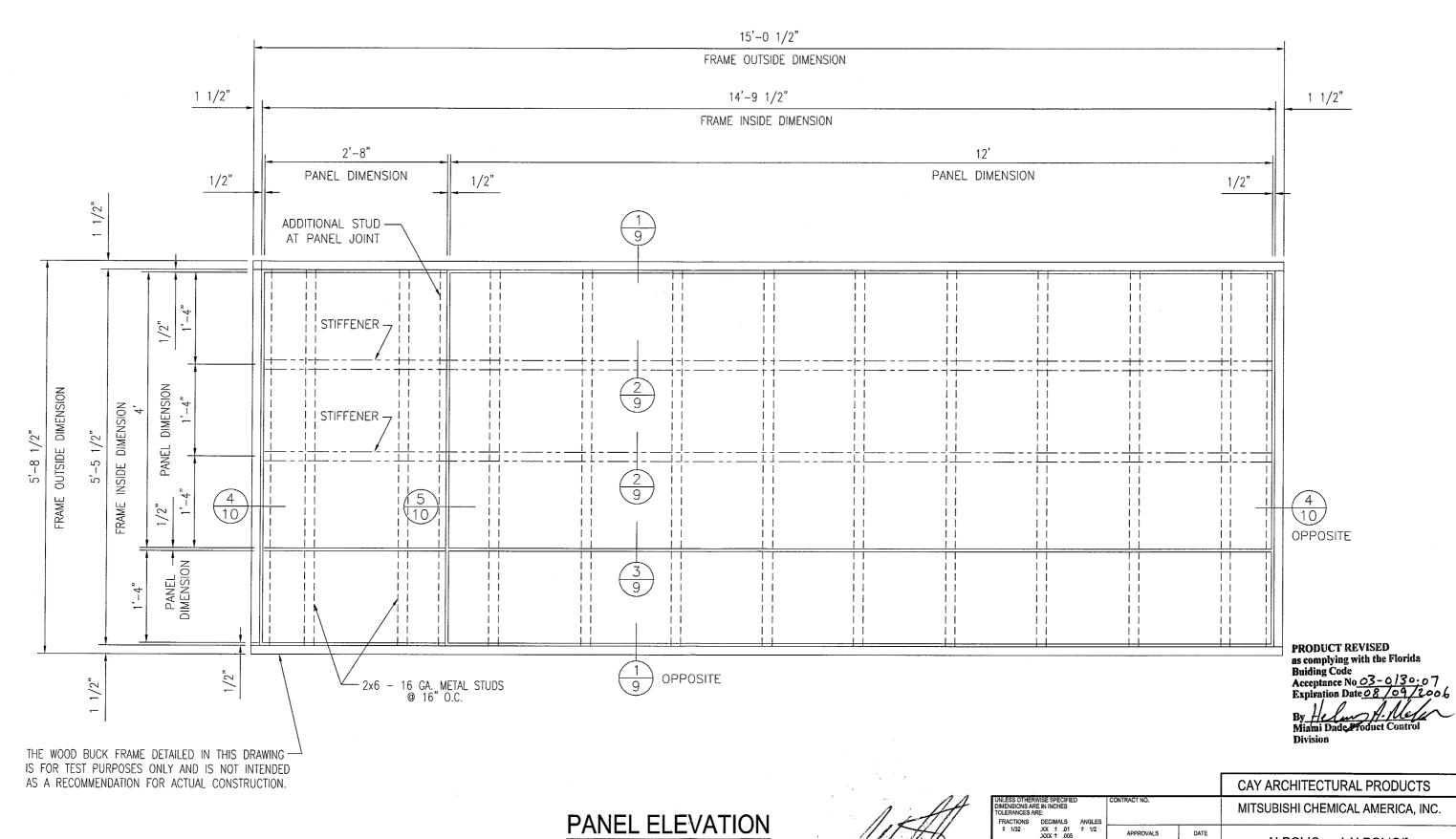
FACTOR: 17

PRODUCT REVISED
as complying with the Florida
Building Code

Acceptance No 03 - 0130.07 Expiration Date 08/09/2006

By He lungf Mello Miami Dade Product Control Division

Kistler McDougall MITSUBISHI CHEMICAL AMERICA, INC. ALPOLIC and ALPOLIC/fr COMPOSITE WALL PANEL SYSTEMS



3/4" = 1'-0"

			CAY ARCHITECTURAL PRODUCTS			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:	CONTRACT NO.	·	MITSUBISHI CHEMICAL AMERICA, INC.			
FRACTIONS DECIMALS ANGLES	1		· 1			
‡ 1/32 .XX ± .01 ± 1/2 .XXX ± .005	APPROVALS	DATE	ALDOLIC and ALDOLIC/F			
MATERIAL	DRAWN		ALPOLIC and ALPOLIC/fr			
4MM & 6MM ALPOLIC	1		COMPOSITE MALL BANKS OVOTENO			
& 4MM ALPOLIC/fr	ENGINEERING	<del>                                     </del>	COMPOSITE WALL PANEL SYSTEMS			
FINISH	MS MS	11/11/02				
	PROJ MGMT		SIZE CAGE CODE DWG NO. REV			
			B 1-P 1			
	PRODUCTION		D 1			
DO NOT SCALE DRAWING	1		SCALE SHOWN SHEET 8 OF 10			

